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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/887,784

DATE: 01/02/2002
TIME: 13:13:40

Input Set : A:\3759-0115P.ST25.txt
Output Set: N:\CRF3\01022002\I887784.raw

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 3 <110> APPLICANT: BJORN, Sara et al
 5 <120> TITLE OF INVENTION: NOVEL FLUORESCENT PROTEINS
 7 <130> FILE REFERENCE: 3759-0115P
 9 <140> CURRENT APPLICATION NUMBER: US 09/887,784
10 <141> CURRENT FILING DATE: 2001-06-19
12 <160> NUMBER OF SEQ ID NOS: 24
14 <170> SOFTWARE: PatentIn version 3.0
17 <210> SEQ ID NO: 1
18 <211> LENGTH: 720
19 <212> TYPE: DNA
20 <213> ORGANISM: Aequoria Victoria
22 <220> FEATURE:
23 <221> NAME/KEY: CDS
24 <222> LOCATION: (1)...(717)
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29   1               5                  10                  15
31  gtc gag ctg gac ggc gac gta aac ggc cac aag ttc agc gtg tcc ggc       96
32  Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
33              20                  25                  30
35  gag ggc gag ggc gat gcc acc tac ggc aag ctg acc ctg aag ttc atc      144
36  Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
37          35                  40                  45
39  tgc acc acc ggc aag ctg ccc gtg ccc tgg ccc aca cta gtg acc acc      192
40  Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
41      50                  55                  60
43  ctg tct tac ggc gtg cag tgc ttc agc cgc tac ccc gac cac atg aag      240
44  Leu Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
45  65                  70                  75                  80
47  cag cac gac ttc ttc aag tcc gcc atg ccc gaa ggc tac gtc cag gag      288
48  Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
49                  85                  90                  95
51  cgc acc atc ttc ttc aag gac gac ggc aac tac aag acc cgc gcc gag      336
52  Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
53              100                 105                 110
55  gtg aag ttc gag ggc gac acc ctg gtg aac cgc atc gag ctg aag ggc      384
56  Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
57          115                 120                 125
59  atc gac ttc aag gag gac ggc aac atc ctg ggg cac aag ctg gag tac      432
60  Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
61      130                 135                 140
63  aac tac aac agc cac aac gtc tat atc atg gcc gac aag cag aag aac      480
64  Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
65  145                 150                 155                 160
67  ggc atc aag gtg aac ttc aag atc cgc cac aac atc gag gac ggc agc      528
68  Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
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Output Set: N:\CRF3\01022002\I887784.raw

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69                  165                 170                 175
71  gtg cag ctc gcc gac cac tac cag cag aac acc ccc atc ggc gac ggc      576
72  Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
73              180                 185                 190
75  ccc gtg ctg ctg ccc gac aac cac tac ctg agc acc cag tcc gcc ctg      624
76  Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu
77          195                 200                 205
79  agc aaa gac ccc aac gag aag cgc gat cac atg gtc ctg ctg gag ttc      672
80  Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
81      210                 215                 220
83  gtg acc gcc gcc ggg atc act ctc ggc atg gac gag ctg tac aag          717
84  Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
85  225                 230                 235
87  taa                                                              720
89 <210> SEQ ID NO: 2
90 <211> LENGTH: 239
91 <212> TYPE: PRT
92 <213> ORGANISM: Aequoria Victoria
94 <400> SEQUENCE: 2
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96   1               5                  10                  15
97  Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
98              20                  25                  30
99  Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
100         35                  40                  45
101  Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
102     50                  55                  60
103  Leu Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
104 65                  70                  75                  80
105  Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
106                 85                  90                  95
107  Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
108             100                 105                 110
109  Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
110         115                 120                 125
111  Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
112     130                 135                 140
113  Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
114 145                 150                 155                 160
115  Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
116                 165                 170                 175
117  Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
118             180                 185                 190
119  Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu
120         195                 200                 205
121  Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
122     210                 215                 220
123  Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
124  225                 230                 235
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PATENT APPLICATION: US/09/887,784 TIME: 13:13:40

Input Set : A:\3759-0115P.ST25.txt
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<211> LENGTH: 720
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<213> ORGANISM: Aequoria Victoria
<220> FEATURE:
<221> NAME/KEY: CDS
<222> LOCATION: (1)...(717)
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Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
 1               5                  10                  15

gtc gag ctg gac ggc gac gta aac ggc cac aag ttc agc gtg tcc ggc       96
Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
            20                  25                  30

gag ggc gag ggc gat gcc acc tac ggc aag ctg acc ctg aag ttc atc      144
Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
        35                  40                  45

tgc acc acc ggc aag ctg ccc gtg ccc tgg ccc aca cta gtg acc acc      192
Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
    50                  55                  60

ctg tct tac ggc gtg cag tgc ttc agc cgc tac ccc gac cac atg aag      240
Leu Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
65                  70                  75                  80

cag cac gac ttc ttc aag tcc gcc atg ccc gaa ggc tac gtc cag gag      288
Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
                85                  90                  95

cgc acc atc ttc ttc aag gac gac ggc aac tac aag acc cgc gcc gag      336
Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
            100                 105                 110

gtg aag ttc gag ggc gac acc ctg gtg aac cgc atc gag ctg aag ggc      384
Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
        115                 120                 125

atc gac ttc aag gag gac ggc aac atc ctg ggg cac aag ctg gag tac      432
Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
    130                 135                 140

aac tac aac agc cac aac gtc tat atc atg gcc gac aag cag aag aac      480
Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
145                 150                 155                 160

ggc atc aag gtg aac ttc aag atc cgc cac aac atc gag gac ggc agc      528
Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
                165                 170                 175

gtg cag ctc gcc gac cac tac cag cag aac acc ccc atc ggc gac ggc      576
Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
            180                 185                 190

ccc gtg ctg ctg ccc gac aac cac tac ctg agc acc cag tcc gcc ctg      624
Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu
        195                 200                 205

agc aaa gac ccc aac gag aag cgc gat cac atg gtc ctc cta ggg ttc      672
Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe
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Input Set : A:\3759-0115P.ST25.txt
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190      210                 215                 220
192  gtg acc gcc gcc ggg atc act ctc ggc atg gac gag ctg tac aag          717
193  Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
194  225                 230                 235
196  taa                                                                  720
198 <210> SEQ ID NO: 4
199 <211> LENGTH: 239
200 <212> TYPE: PRT
201 <213> ORGANISM: Aequoria Victoria
203 <400> SEQUENCE: 4
204  Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
205   1               5                  10                  15
206  Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
207              20                  25                  30
208  Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
209          35                  40                  45
210  Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
211      50                  55                  60
212  Leu Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
213  65                  70                  75                  80
214  Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
215                  85                  90                  95
216  Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
217              100                 105                 110
218  Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
219          115                 120                 125
220  Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
221      130                 135                 140
222  Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
223  145                 150                 155                 160
224  Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
225                  165                 170                 175
226  Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
227              180                 185                 190
228  Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu
229          195                 200                 205
230  Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Gly Phe
231      210                 215                 220
232  Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
233  225                 230                 235
235 <210> SEQ ID NO: 5
236 <211> LENGTH: 717
237 <212> TYPE: DNA
238 <213> ORGANISM: Aequoria Victoria
240 <220> FEATURE:
241 <221> NAME/KEY: CDS
242 <222> LOCATION: (1)...(714)
244 <400> SEQUENCE: 5
245  atg agt aaa gga gaa gaa ctt ttc act gga gtt gtc cca att ctt gtt        48
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Input Set : A:\3759-0115P.ST25.txt
Output Set: N:\CRF3\01022002\I887784.raw

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246  Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val
247   1               5                  10                  15
249  gaa tta gat ggc gat gtt aat ggg caa aaa ttc tct gtt agt gga gag        96
250  Glu Leu Asp Gly Asp Val Asn Gly Gln Lys Phe Ser Val Ser Gly Glu
251              20                  25                  30
253  ggt gaa ggt gat gca aca tac gga aaa ctt acc ctt aaa ttt att tgc       144
254  Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
255          35                  40                  45
257  act act ggg aag cta cct gtt cca tgg cca acg ctt gtc act act ctc       192
258  Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Leu
259      50                  55                  60
261  tct tat ggt gtt caa tgc ttt tct aga tac cca gat cat atg aaa cag       240
262  Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln
263   65                  70                  75                  80
265  cat gac ttt ttc aag agt gcc atg ccc gaa ggt tat gta cag gaa aga       288
266  His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
267                  85                  90                  95
269  act ata ttt tac aaa gat gac ggg aac tac aag aca cgt gct gaa gtc       336
270  Thr Ile Phe Tyr Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
271              100                 105                 110
273  aag ttt gaa ggt gat acc ctt gtt aat aga atc gag tta aaa ggt att       384
274  Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
275          115                 120                 125
277  gat ttt aaa gaa gat gga aac att ctt gga cac aaa atg gaa tac aat       432
278  Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Met Glu Tyr Asn
279      130                 135                 140
281  tat aac tca cat aat gta tac atc atg gca gac aaa cca aag aat ggc       480
282  Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Pro Lys Asn Gly
283  145                 150                 155                 160
285  atc aaa gtt aac ttc aaa att aga cac aac att aaa gat gga agc gtt       528
286  Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Lys Asp Gly Ser Val
287                  165                 170                 175
289  caa tta gca gac cat tat caa caa aat act cca att ggc gat ggc cct       576
290  Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
291              180                 185                 190
293  gtc ctt tta cca gac aac cat tac ctg tcc acg caa tct gcc ctt tcc       624
294  Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
295          195                 200                 205
297  aaa gat ccc aac gaa aag aga gat cac atg atc ctt ctt gag ttt gta       672
298  Lys Asp Pro Asn Glu Lys Arg Asp His Met Ile Leu Leu Glu Phe Val
299      210                 215                 220
301  aca gct gct ggg att aca cat ggc atg gat gaa ggg tac aag               714
302  Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Gly Tyr Lys
303  225                 230                 235
305  taa                                                                  717
307 <210> SEQ ID NO: 6
308 <211> LENGTH: 238
309 <212> TYPE: PRT
310 <213> ORGANISM: Aequoria Victoria
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VERIFICATION SUMMARY
PATENT APPLICATION: US/09/887,784

DATE: 01/02/2002
TIME: 13:13:41

Input Set : A:\3759-0115P.ST25.txt
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